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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/618,710	07/18/2000	Darvin Dale Raph	10991746-1	2017

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EXAMINER
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STEELMAN, MARY J

ART UNIT	PAPER NUMBER
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2122

DATE MAILED: 05/19/2004

10

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/618,710

**Applicant(s)**

RAPH ET AL.

**Examiner**

Mary J. Steelman

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-20 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This action is in response to a Request for Reconsideration filed 12 March 2004.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-20** are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,401,220 to Grey et al.

#### **Per claims 1, 10 and 16:**

-an identifier identifying an instance of the active data type, the computer program with which the active data type is utilized identifying the active data type instance by the identifier associated with the active data type instance; (Col. 5, lines 5-7, "A step type is a modular identifiable unit..." and lines 40-41, "...the first step type defines common functionality and common data (data types) for steps (instances) of the first step type." And lines 53-59, "The user then creates a test sequence file for testing the unit under test...wherein one or more of the steps are of the first step type (instances of the first step type)." Each variable or property has a data type (col. 16, line 63). See col. 4, line 65 – col. 5, line 3, "A step type ...comprises a custom set of properties and/or operations associated with a step...defines common operations and/or data..." Thus a step type contains a defined data type. See col. 14, lines 23-60, "...variables and properties, in which data values can be stored. Variables are properties that the user can freely

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create in certain contexts...Each step...can have properties...variables are used to share data among tests...Values that are stored in variables and properties can be passed to code modules...In TestStand, the values of variables and properties can be used in numerous ways, such as passing a variable to a code module or using a property value to determine whether to execute a step (associated algorithm).” Col. 15, lines 37-60, “When the user creates a variable or property, the user specifies its data type...When a named data type is created, the user can reuse the named data type for multiple variables or properties...the values they contain can differ...TestStand defines certain standard named data types. The user can add sub-properties...The user can define his/her own custom named data types. The user must choose a unique name (identifier) for each of the custom data types...When the user creates a variable or property, the user can select from among the simple property types and the named data types.”)

-at least a first algorithm associated with the active data type, the first algorithm being configured to be automatically executed when an attempt is made to access a value associated with the active data type instance. (Col. 6, lines 1-5, “...executing the pre-step functionality; executing a code module referenced by the step after executing the pre-step functionality; and executing the post-step functionality...” Col. 25, lines 31-34, “...when the user create and/or stores a...data of a first type in the file, the TestStand Engine automatically stores a type definition of the first type in the file in response thereto (algorithm associated with the active data type).” Additional examples of associated algorithms are found in column 25.)

**Per claims 2, 11, and 17:** (Col. 6, lines 55-65.)

**Per claims 3, 12, and 18:** (Col. 23, lines 56-65.)

**Per claims 4, 13 and 19:** (Col. 6, lines 44-54.)

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**Per claims 5, 14, and 20:** (Col. 6, lines 55-64 and col. 18, lines 27-35.)

**Per claim 6:** (Col. 17, lines 47-67.)

**Per claim 7:** (Col. 17, lines 47-67.)

**Per claim 8:** (Col. 17, lines 47-67.)

**Per claims 9 and 15:** (Abstract, lines 1-8 and col. 7, lines 18-22.)

***Response to Arguments***

4. Applicant's arguments filed in Request for Reconsideration, entered 12 March 2004, have been fully considered but they are not persuasive.

Independent claims 1, 10, and 16 read very broadly on an object (a data type), which has associated functions, some of which may automatically execute upon an access. Of course all objects have identifiers. Objects may contain associated data and methods. 'Getter' methods are used to access a named / identified instance of an object. Methods owned by the object manipulate data. Object oriented programming and objects are well known in the art.

Grey creates a type, referred to as a "step type". As noted in the previous office action, "step types", as defined by Grey, meet the definition provided by the Applicant for "active data types". That includes an "identifier identifying an instance" and "at least a first algorithm associated with the...type...automatically executed when an attempt is made to access a value associated..." Support for this can be found at col. 5, lines 5-7, "A step type is a modular,

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**identifiable** (has an identifier) unit...” (emphasis added) Additionally, (col. 5, lines 4-5, 8, 40-41) **step types define common operations / functionality** (association of algorithms) and **data / property values / properties** (value associated with active data type instance). (emphasis added) Col. 5, line 47, “The common data includes one or more property values...” (Association of algorithm to an active data type or a particular variable or value...) Grey’s algorithms do execute in response to a call for a specific value of an active data type. Support for this feature can be found at col. 5, lines 61-65, “When steps of the first step type are executed, execution **includes executing the common functionality** of the one or more of the steps (object instances) which are of the first step type and also includes utilizing the common data (call for a specific value) for the one or more of the steps which are of the first step type.” (emphasis added) At col. 7, lines 62-67, “The user then configures the results to be collected (values). This...includes defining one or more properties to be collected (values) for one or more of the steps in the sequence.” (execute in response to a call for a specific value.)

**Applicants have argued, in substance, the following:**

(A) Page 2, Section B, Grey “does not improve upon the built-in standard data types or even customized data types.” Grey “does not describe changes to the conventional data types (custom or standard), but instead describes in detail the new concept of “step types”.” Grey “appears to be concerned only with this new concept of “step types” and does not attempt to alter conventional data types.”

**Examiner’s Response:**

These are not claim limitations.

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**Applicants have argued, in substance, the following:**

(B) Page 3, Section C - page 4, 1<sup>st</sup> paragraph, in reference to claim 1, Grey “fails to disclose an algorithm associated with an active data type and executing the algorithm when an attempt is made to access a value associated with the active data type.”

**Examiner’s Response:**

Support for this feature can be found at col. 5, lines 61-65, “When steps of the first step type are executed, execution includes executing the common functionality (algorithms) of the one or more of the steps (object instances) which are of the first step type (defined object) and also includes utilizing the common data for the one or more of the steps (object instances) which are of the first step type.” Also, col. 5, line 67 – col. 6, line 5, “...execution of the step (object instance) (executing the algorithm when an attempt is made to access a value associated with the active data type) includes: executing the pre-step functionality (associated algorithm); executing a code module referenced by the step after executing the post-step functionality (associated algorithm); executing the post-step functionality after executing the code module (associated algorithm);

**Applicants have argued, in substance, the following:**

(C) Page 4, Section D, in reference to claim 10, Grey “does not disclose a data type having an algorithm.” Grey “fails to teach or suggest executing an algorithm, associated with a data type, when an attempt is made to access a value associated with the data type.” Grey “fails to disclose

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an algorithm associated with an active data type and executing the algorithm when an attempt is made to access a value associated with the active data type.”

**Examiner's Response:**

See col. 5, lines 4-5, 8, 40-41, step types define common operations / functionality (association of algorithms) and **data / property values / properties** (value associated with active data type instance). (emphasis added) Also see col. 5, line 47, “The common data includes one or more property values...” (Association of algorithm to an active data type or a particular variable or value...)

**Applicants have argued, in substance, the following:**

(D) Page 5, Section E, Grey fails to disclose an algorithm associated with an active data type and executing the algorithm when an attempt is made to access a value associated with the active data type.

**Examiner's Response:**

See comments made in (B) above.

Therefore, the rejection of claims 1-20 is proper and maintained.

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**



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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

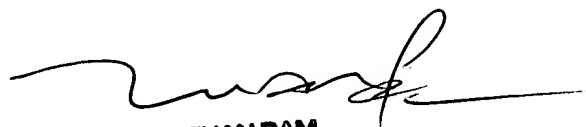
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Steelman, whose telephone number is (703) 305-4564. The examiner can normally be reached Monday through Thursday, from 7:00 A.M. to 5:30 P.M. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on (703) 305-4552.

The fax phone number is (703) 872-9306 for regular communications and for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Mary Steelman



05/13/2004



**TUAN DAM**  
**SUPERVISORY PATENT EXAMINER**